

Central Valley Regional Water Quality Control Board

14 April 2017

Mr. Parry Klassen
Executive Director
East San Joaquin Water Quality Coalition
1201 L Street
Modesto, CA 95354

Dr. Michael Johnson
Technical Program Manager
East San Joaquin Water Quality Coalition
1480 Drew Ave. Suite 130
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APPROVAL OF MANAGEMENT PLAN COMPLETION – EAST SAN JOAQUIN WATER QUALITY COALITION

Thank you for submitting the 7 December 2016 request to remove specific constituents from select East San Joaquin Water Quality Coalition (Coalition) site subwatershed management plans. The request proposes to remove 15 site/constituent pairs from active management plan status and from the management plan monitoring schedule.

The Coalition has implemented management plans according to requirements in the Waste Discharge Requirements General Order R5-2012-0116-R3 for Growers within the Eastern San Joaquin River Watershed that are Members of a Third-party Group (Order). The Coalition's approved Surface Water Management Plan has been implemented as a part of the Order. The conditions for requesting completion of a Management Plan outlined in the Order apply (Attachment B, Appendix MRP-1, Section III, pages 8 and 9).

Based on the information provided in the request letter and in the enclosed staff review, I approve the completion of management plans for the following ten site/constituent pairs.

- Deadman Creek @ Gurr Rd (chlorpyrifos)
- Dry Creek @ Rd 18 (diuron, *Selenastrum capricornutum*)
- Dry Creek @ Wellsford Rd (chlorpyrifos)
- Hilmar Drain @ Central Ave (*Hyalella azteca*)
- Livingston Drain @ Robin Ave (chlorpyrifos)
- Miles Creek @ Reilly Rd (diazinon, *Selenastrum capricornutum*)
- Prairie Flower Drain @ Crows Landing Rd (dimethoate)
- West Port Drain @ Vivian Rd (chlorpyrifos)

Implementation of management plans must continue for Berenda Slough Along Ave ½ (chlorpyrifos), Deadman Creek @ Hwy 59 (chlorpyrifos), Duck Slough @ Gurr Rd (*Hyalella azteca*), Livingston Drain @ Robin Ave (*Selenastrum capricornutum*) and Westport Drain @ Vivian Rd (*Selenastrum capricornutum*) because the monitoring data do not support completion of the management plans.

If you have any questions or comments regarding this letter, or need further information, please contact Yared Kebede at yared.kebede@waterboards.ca.gov or by phone at 916-464-4828.

Sincerely,

Original signed by

Pamela C. Creedon
Executive Officer

Enclosures: Staff Review of Request to Remove Constituents from Management Plan –
East San Joaquin Water Quality Coalition

Central Valley Regional Water Quality Control Board

TO: Susan Fregien
Senior Environmental Scientist
Monitoring and Implementation Unit
Irrigated Lands Regulatory Program

FROM: Yared Kebede
Environmental Scientist
Monitoring and Implementation Unit
Irrigated Lands Regulatory Program

DATE: 17 March 2017

SUBJECT: REQUEST TO REMOVE CONSTITUENTS FROM MANAGEMENT PLAN –
EAST SAN JOAQUIN WATER QUALITY COALITION

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a request from the East San Joaquin Water Quality Coalition (Coalition) on 7 December 2016 to remove a total of 15 site/constituent pairs in 11 site subwatersheds from the management plan monitoring schedule, (i.e., management plan completion).

Based on the Waste Discharge Requirements for Growers within the Eastern San Joaquin River Watershed Order R5-2012-0116-R3 (Order), at least three years of compliance with water quality trigger limits during the times of year when previous exceedances occurred, documented education and outreach, and implementation of management practices to address the water quality problems must be demonstrated before a management plan can be petitioned for completion (Section III of the MRP-1). In addition, management plan monitoring scheduled during months of peak pesticide use as approved in the Monitoring Plan Update reports are considered when evaluating the three years of monitoring requirements during the times of past exceedances.

Staff reviewed the Coalition's request and evaluated whether completion of management plans for petitioned site/constituent pairs is justified. Staff's recommendations fall into one of two categories: (I) there is sufficient information to justify the removal of site/constituent pairs from the management plan or (II) the completion of management plans cannot be recommended because additional monitoring data is required to demonstrate that the water quality problem is no longer occurring.

I. Management plan no longer required

Staff recommends that management plans are no longer required for ten site/constituent pairs since there has been sufficient monitoring to demonstrate that water quality problems are no longer occurring. Since the most recent exceedance, education and outreach, implemented management practices in each subwatershed, and demonstration of the effectiveness of the management practices justify the completion of management plans at these sites.

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

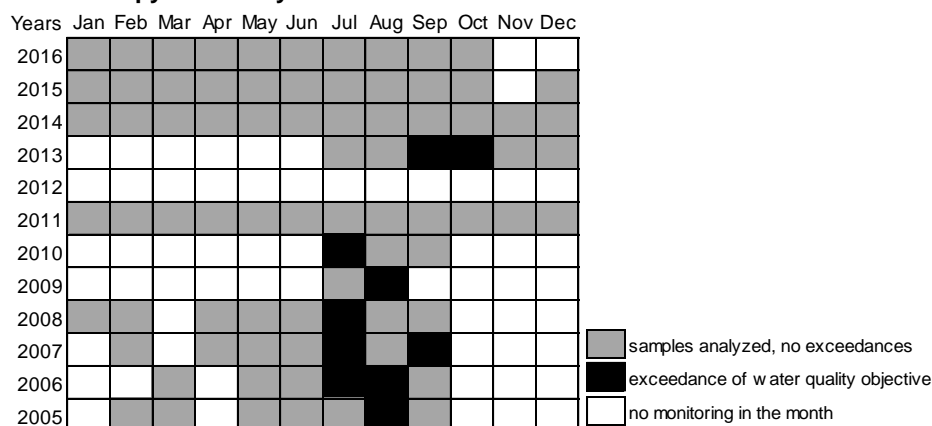
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There were three exceedances of diuron in the Dry Creek @ Rd 18 subwatershed in 2008 (January, February) and 2013 (January); the 2008 exceedances coincided with *S. capricornutum* toxicity. Dry Creek was dry during the January monitoring event from 2014-2016, but diuron was not detected during the storm monitoring event in the February and March samples. In addition, the PUR data shows that no diuron application occurred in January from 2014-2016. Staff recommends completion of the diuron management plan.

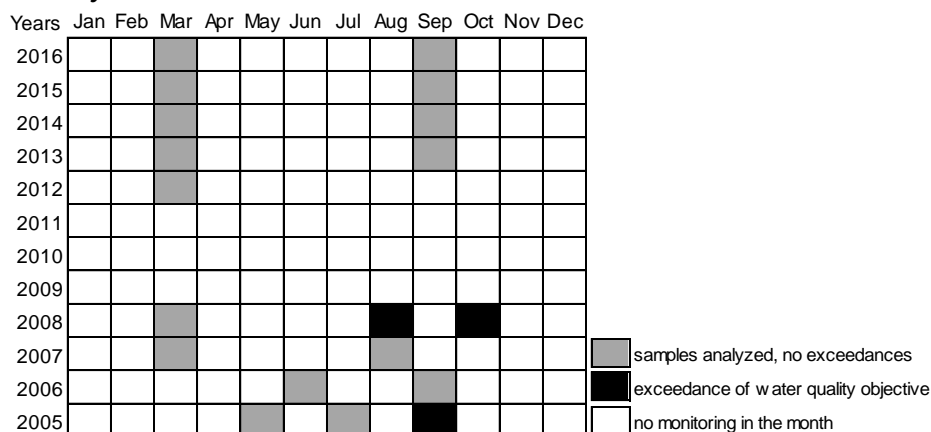
There were five instances of *S. capricornutum* toxicity in Dry Creek @ Rd 18 in May 2007 (64.2% growth compared to the control), January, February and March 2008 (36.6%, 76.8% and 34% growth; respectively) and February 2013 (4% growth); the March 2008 toxicity was due to a resample for the observed toxicity in the February 2008 sample. The TIEs conducted in January 2008 and February 2013 samples were not conclusive. The Coalition has completed three years of monitoring with no *S. capricornutum* toxicity.

Focused outreach in Dry Creek @ Rd 18 occurred from 2011 to 2013. The Coalition contacted 17 targeted growers farming 4,710 acres (2013 MPUR, page 34). The majority of targeted growers implemented several irrigation, erosion and sediment, and pest management practices (2012 MPUR pages 107-112). The Coalition recommended additional practices designed to manage spray drift, irrigation tailwater, and storm water runoff to three growers and documented the newly implemented management practices. Monitoring data, pesticide use and focused outreach efforts justify diuron and *S. capricornutum* management plan completion.

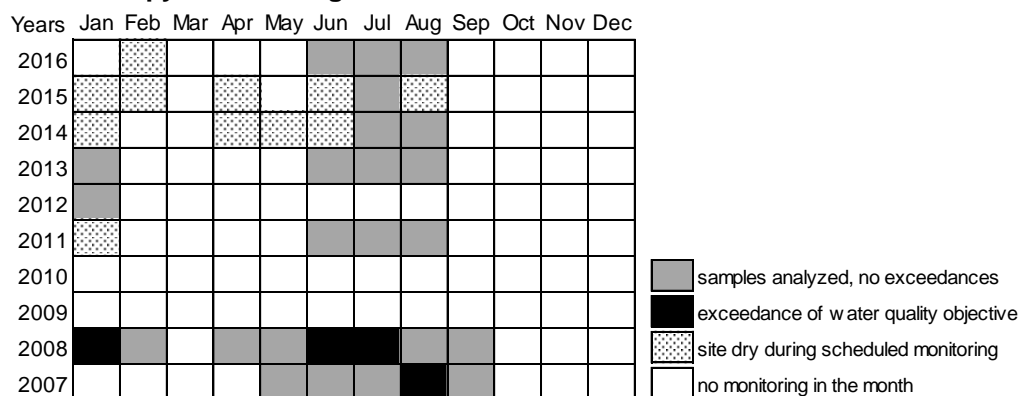
D. Chlorpyrifos in Dry Creek @ Wellsford Rd



There were ten chlorpyrifos exceedances in Dry Creek @ Wellsford Rd between August 2005 and October 2013. The PUR data indicate that recent chlorpyrifos use in the Dry Creek @ Wellsford Rd site subwatershed has significantly declined during the peak application periods (May-October). The Coalition conducted focused outreach to 25 targeted growers farming 6,392 acres from 2008 to 2010 (2011 MPUR, Table 8). According to the survey and follow-up results, targeted growers implemented management practices including shutting off outside nozzles when spraying next to surface water, constructing drainage basins, maintaining filter strips, using tailwater return systems, and using less water during surface irrigation. Monitoring results during three consecutive years of monitoring shows the effectiveness of implemented management practices.

E. *Hyaella azteca* in Hilmar Drain @ Central Avenue

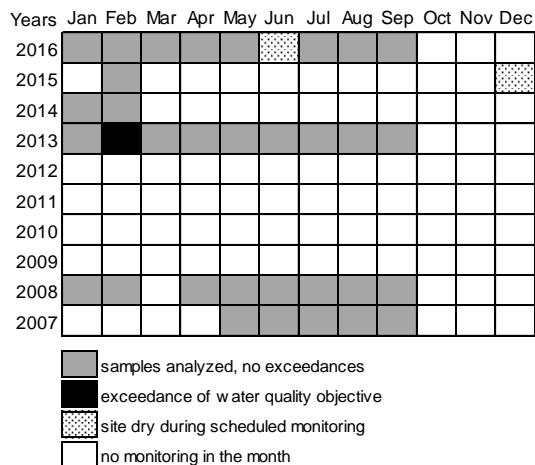
There were three exceedances of sediment toxicity in the Hilmar Drain @ Central Ave subwatershed since the Coalition started monitoring for *H. azteca* in 2005; no pesticide detection concurred with the sediment toxicity results. As part of focused management plan implementation from 2012 to 2014, the Coalition contacted three members farming 455 acres within the subwatershed. Two of the targeted growers implemented all of the management practices recommended by the Coalition including using tailwater return systems, improving berms between fields and waterways, and installing a device to control timing of pump/drain into waterway. In addition, both growers took additional actions to manage spray drift. The complete analysis of implemented management practices is documented in the 2014 Annual Report (Pages 167-169). Monitoring data, pesticide use and focused outreach efforts justify management plan completion.

F. Chlorpyrifos in Livingston Drain @ Robin Avenue

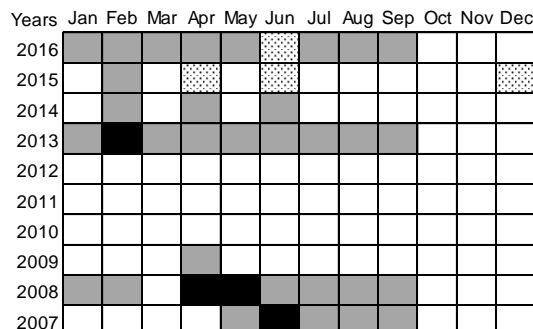
There were four chlorpyrifos exceedances in Livingston Drain @ Robin Ave in August 2007 and in 2008 (January, June and July). Since the last exceedance in July 2008, the Coalition has completed three years of monitoring with no exceedances. Focused outreach in Livingston Drain @ Robin Ave occurred from 2011 to 2013. The Coalition conducted individual meetings with 11 growers farming 335 acres in 2011, and provided information to encourage the retention of stormwater and reduce spray drift. Continued follow-up with all targeted growers was conducted in 2012 to document the implementation of recommended and/or new management practices. The targeted growers only sprayed areas close to the waterbody when the wind is blowing away, reduced water use in surface irrigation, and installed drip irrigation systems. A summary of implemented and recommended management practices is provided in the 2013

MPUR (Pages 68-69). Monitoring results since the most recent exceedances in 2008 demonstrated the effectiveness of the implemented management practices in the subwatershed.

G. Diazinon in Miles Creek @ Reilly Rd



H. *Selenastrum capricornutum* in Miles Creek @ Reilly Rd

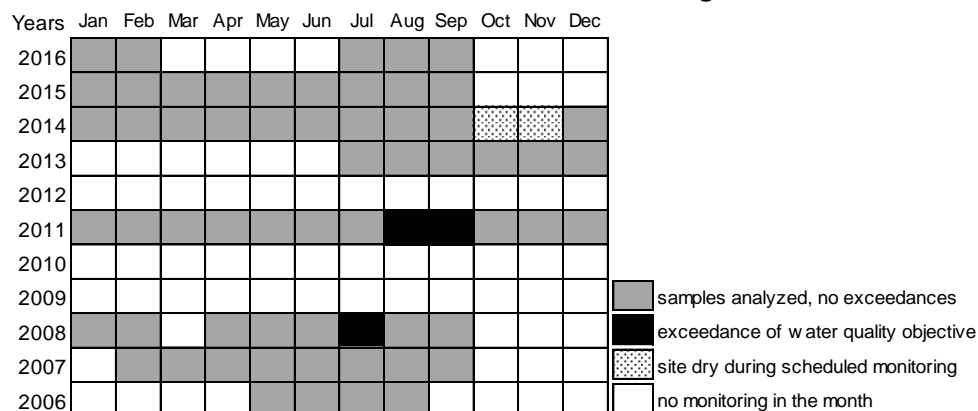


A diazinon exceedance in the field duplicate sample collected at Miles Creek @ Reilly Rd during the February 2013 monitoring event triggered the diazinon management plan. Since the last exceedance in February 2013, the Coalition has completed three years of monitoring with no exceedances. In addition, the PUR data indicates that diazinon application has not occurred in the site subwatershed since 2012.

There were four exceedances of *S. capricornutum* water column toxicity in Miles Creek @ Reilly Rd, in June 2007, April and May 2008, and February 2013. Copper and lead were associated with the observed toxicity in the June 2007 sample. The TIE implicated cationic metals and non-polar organics in the April 2008 sample; the February 2013 sample lost toxicity before the baseline TIE tests were completed. The Coalition has completed three years of monitoring with no exceedances.

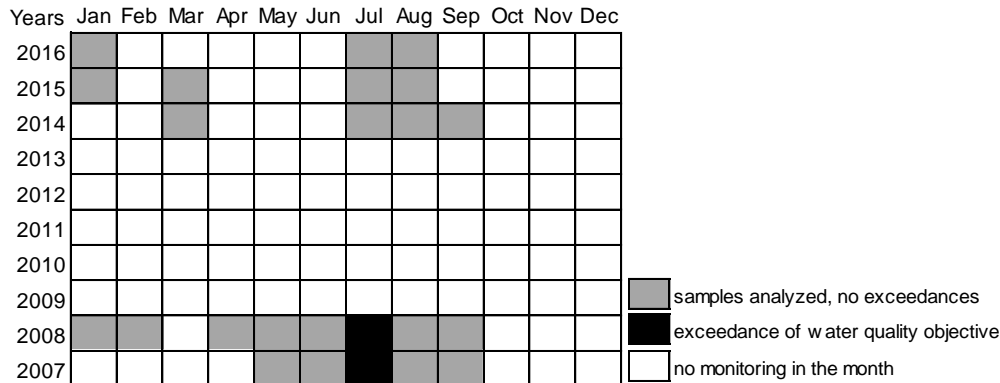
Since focused outreach began in 2013, the Coalition completed contacts with nine targeted growers farming 1,533 acres. The Coalition recommended spray drift management practices such as calibrating prior to each spray application, adjusting spray nozzles to match the canopy profile, and shutting off outside nozzles to five targeted growers. The Coalition followed-up with the five targeted growers in 2014, and all the targeted growers have implemented the recommended management practices. The complete analysis of all management practices is provided in the 2015 Annual Report (Pages 161-163). No diazinon and *S. capricornutum* exceedances have occurred during three years of monitoring since the February 2013 exceedances, demonstrating the effectiveness of the implemented practices.

I. Dimethoate in Prairie Flower Drain @ Crows Landing Rd



There were three instances of dimethoate exceedances in the Prairie Flower Drain @ Crows Landing Rd subwatershed in 2008 (July) and 2011 (August, September). Focused outreach in Prairie Flower Drain @ Crows Landing Rd occurred from 2008 to 2010. The Coalition contacted 11 targeted growers farming 865 acres (2011 MPUR, Table 8). The Coalition followed up with targeted growers in 2010 and the majority of growers implemented new management practices recommended by the Coalition, such as reducing the amount of water used in surface irrigation, installing devices to control discharge, use of drainage basins and application of polyacrylamide. Monitoring results from three years of monitoring since the most recent exceedances demonstrate the effectiveness of the implemented management practices in the subwatershed.

J. Chlorpyrifos in Westport Drain @ Vivian Rd



There were two chlorpyrifos exceedances in West Port Drain @ Vivian Rd in July 2007 and July 2008. Chlorpyrifos has not been detected since the last exceedance in July 2008 in the site subwatershed. As part of focused outreach (2014-2016), the Coalition conducted individual meetings with three targeted growers farming 451 acres. The Coalition followed up with one targeted grower in 2015, and the grower took action to manage spray drift, i.e., the grower sprays areas close to waterbodies only when the wind is blowing away (2016 Annual Report, page 137). The Coalition has completed three years of monitoring with no chlorpyrifos exceedances, demonstrating the effectiveness of the implemented practices.

II. Additional monitoring required

The Coalition has requested management plan completion for the five site/constituent pairs in Figures A-E. However, 3 years of data showing no exceedances during the times of year when exceedances occurred has not been attained. Staff recommends additional monitoring is required to meet the three years of compliance with receiving water limitations.

